

YOU'VE GOT LARYNGO WHAT!

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Affectionately known by those in the scientific community as LT, Laryngotracheitis is one of the fastest spreading and most deadly diseases of poultry if it is not quickly diagnosed and dealt with immediately. LT, is a virus thought to be in the herpes virus family of viruses. It spreads rapidly from bird to bird via the upper respiratory tract and the intraocular (eye) route. This virus colonizes (grows) in the lining of the trachea (throat) of the birds causing tissue degeneration and hemorrhages in the trachea (throat). LT, can also be spread by inanimate objects, such as feeders, and drinkers, and litter that have been contaminated. Transmission through the egg does not occur as embryos infected with the LT virus die before they hatch. Consequently the LT virus is detrimental to your hatching season.

Symptoms usually appear from 5 to 10 days after exposure to the LT virus. Mortality can

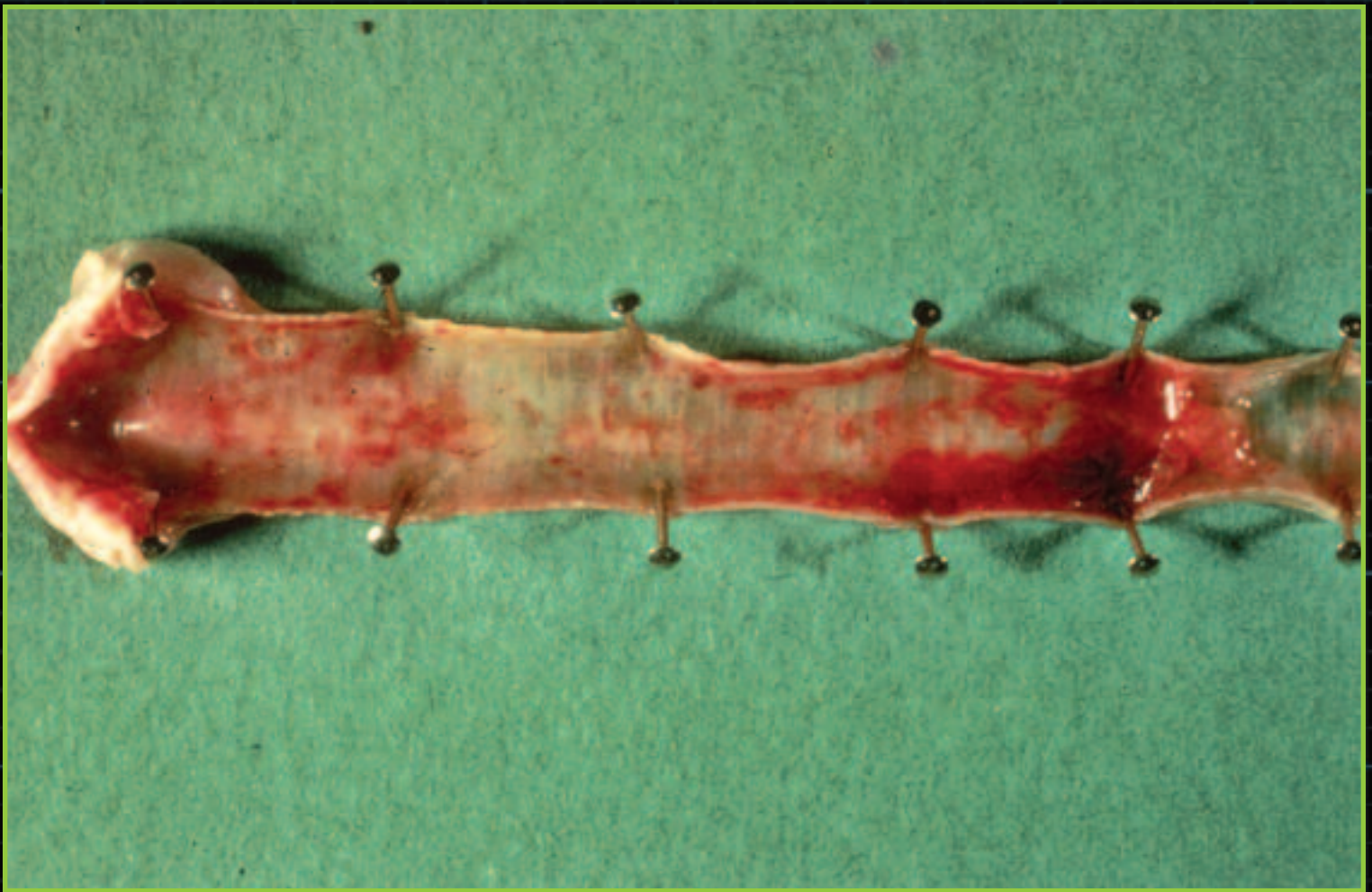
run as high as 70% but usually averages 10% to 20%. In its Epizootic (epidemic) form LT can and does infect 90% to 100% of a flock.. Symptoms are as follows: depression, gasping for air, high mortality and a tinging of the mucous in the mouth with blood. In some cases it will appear as a pinkish color rather than bright red. In the more severe cases the blood will be bright red. In an attempt to clear the debris from its throat, the birds may sling their heads from side to side thus throwing blood all over the chicken coop. Birds that are infected by the intratracheal (throat) route have a higher degree of infection and seem to have a more severe case of the disease than those that are infected by other routes. Infection by this route also has a shorter incubation time, which is usually 2 to 4 days. Caution should be exercised as there is a subacute (less virulent) form of this disease that is milder than the acute (severe) or the Epizootic form that was mentioned above. With the subacute form the symptoms are as follows: unthriftiness, loss of egg production, watery eyes, conjunctivitis, swelling of the infra orbital sinuses (under the eye), persistent nasal discharge, rattles and coughing. You will need to decide if you have Coryza, or Infectious Bronchitis as these diseases as well as the diphtheritic (lesions in the mouth) form of Fowl Pox have many of the same symptoms as the subacute (less virulent) form.

Some birds that have recovered from a natural outbreak will remain carriers for a period of time after the infection has subsided. The disease usually runs its course in about 2 to 3 weeks depending on the severity of the outbreak. Vaccinating with a mild tissue culture LT vaccine can and does stop the carrier state.

No effective treatment is available, but keeping the birds quiet, and lessening the amount of dust, and virus particles in the chicken house through increased ventilation will help control the disease until vaccination can take place. The LT virus is



A normal trachea (windpipe) with the Glottis end on the right. The Bronchi are located on the left side as they would branch off and go to the lungs.



Trachea (windpipe) of a bird infected with Laryngotracheitis exhibiting bloody mucus. The Glottis is on the left. The Glottis is the beginning of the Trachea and is located in the floor of the mouth just behind the birds tongue.

sensitive to most disinfectants and heat. Oxine would be effective against this virus as well as many others.

Vaccination and Bio-Security are your only defense against this deadly disease. Since all LT vaccines were not created equal it is important to choose the right vaccine. The majority of vaccines produced for vaccinating for LT are made from chick embryos, which makes them too strong or virulent. This is why when they are used we see some reactions in the eyes that may cause blindness and we also see mild to severe respiratory reactions as well. These chick embryo derived vaccines also have a carrier state, which can last for 2 to 4 weeks after vaccination. The vaccine of choice would be one made from tissue culture, which would limit the eye reactions and the respiratory reactions. Well there are several types of tissue culture vaccines available on the market and these also have a carrier state though not as long as the chick embryo vaccines. So what is one to do . The only vaccine that I would use is the mildest tissue culture vaccine on the market today and that vaccine is called LT-I VAX. It has no carrier

state and does not spread bird to bird and vaccinated birds can be kept with birds that are not vaccinated with out any consequences. It is the mildest vaccine on the market today and as far as I am concerned it is the only vaccine that the Poultry Fanciers should use. Vaccination with LT-I VAX should be done twice per year about 6 to 8 weeks apart for the best protection for your birds.

In the last few years a new vaccine has emerged in the market place. This vaccine is called Vectormune FP-LT and it is a genetically engineered Fowl Pox and LT vaccine. An extremely mild Fowl Pox vaccine is being used to convey LT and Pox protection to the birds through vaccination. The idea here is to eliminate the carrier state of the LT Vaccine by using only a small portion of the LT Virus, that can not spread or duplicate itself. The Pox Virus is used to stimulate the Immune System to build Antibodies to the LT Virus and at the same time give protection against Fowl Pox as well as LT. The LT Virus from this Vaccine will not spread bird to bird and will not develop a carrier state .The jury for me is still out on

this Vaccine as it might not give long term protection that people in the Fancy need for their birds. Example: The degree of protection through 24 weeks of age was approximately 80 percent and the degree of protection through 32 weeks of age was approximately 79 percent. The question is after a year will there still be enough protection for the flock and will re-vaccination give as much protection as the first Vaccination. The cost of this vaccine is almost Triple that of the current Vaccines that are available. I will try to keep you posted as more is learned about this new Vaccine.

In some states this is a test and slaughter disease. That is if your flock tests positive for it the chicken police will quarantine your farm and destroy your entire flock and you will have a period of down time for disinfection and cleanup. So keep all of this in mind when considering whether to vaccinate or not. Some states require vaccination for LT prior to shows and this trend will probably be expanded in the more heavily populated poultry states over time. Keep em healthy.